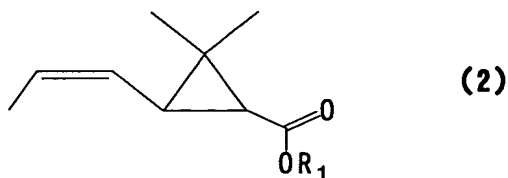


## CLAIMS

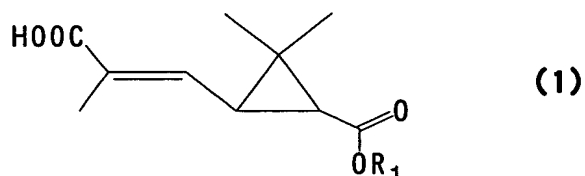
1. A method for producing 3,3-dimethyl-2-(1-propenyl)cyclopropanecarboxylate represented by the formula

5 (2):



wherein  $R_1$  represent an optionally substituted alkyl group, an optionally substituted aryl group or an optionally substituted aralkyl group,

10 which comprises a 3,3-dimethyl-2-(2-carboxy-1-propenyl)cyclopropanecarboxylate represented by the formula (1):



wherein  $R_1$  is as described above,

15 is brought into contact with a copper compound and a nitrogen-containing aromatic compound.

2. The method for producing according to claim 1, wherein the copper compound is a monovalent copper compound.

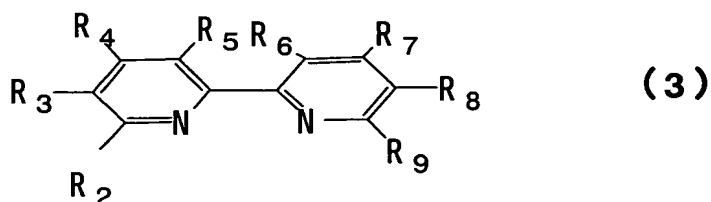
3. The method for producing according to claim 1, 20 wherein the copper compound is a copper compound obtained by reacting a divalent copper compound with a reducing

agent.

4. The method for producing according to claim 1, wherein the copper compound is a copper compound obtained by reacting copper metal with a oxidizing agent.

5 5. The method for producing according to any of claims 1 to 4, wherein the nitrogen-containing aromatic compound is quinoline.

6. The method for producing according to any of claims 1 to 4, wherein the nitrogen-containing aromatic compound is a bidentate nitrogen-containing compound represented by the formula (3):



wherein  $R_2$ ,  $R_3$ ,  $R_4$ ,  $R_5$ ,  $R_6$ ,  $R_7$ ,  $R_8$  and  $R_9$  are the same or different, and independently represent a hydrogen atom, an optionally substituted alkyl group, an optionally substituted alkoxy group, an optionally substituted aryl group, an optionally substituted aryloxy group, an optionally substituted aralkyl group, an optionally substituted aralkyloxy group, an optionally substituted alkenyl group, a halogen atom, a nitro group, a cyano group, an optionally substituted acyl group, a sulfo group or an optionally substituted alkoxycarbonyl group; provided that,

$R_2$  and  $R_3$ ,  $R_3$  and  $R_4$ ,  $R_4$  and  $R_5$ ,  $R_5$  and  $R_6$ ,  $R_6$  and  $R_7$ ,  $R_7$  and  $R_8$ , or  $R_8$  and  $R_9$  may be bonded to form a part of the ring structure containing the aromatic ring, and a solvent is used together.

5           7. The method for producing according to claim 6, wherein the bidentate nitrogen-containing compound is a 1,10-phenanthroline compound.

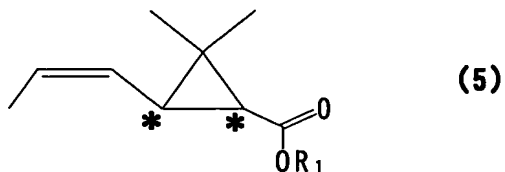
          8. The method for producing according to claim 6, wherein the solvent is a nitrogen-containing aromatic  
10 compound.

          9. The method for producing according to claim 8, wherein the solvent is quinoline.

          10. The method for producing according to claim 1, wherein the reaction is carried out in the presence of  
15 aluminum oxide.

          11. The method for producing according to claim 1, wherein the reaction temperature is 150°C to 230°C.

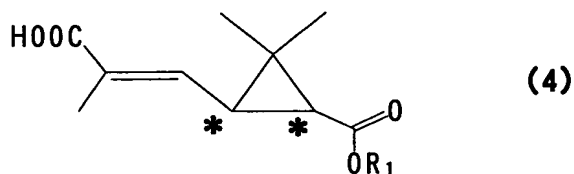
          12. The method for producing according to claim 1, which comprises producing an optically active 3,3-dimethyl-  
20 2-(1-propenyl)cyclopropanecarboxylate represented by the formula (5):



wherein  $R_1$  is the same as the above and \* represents an

asymmetric carbon atom,

by reacting an optically active 3,3-dimethyl-2-(2-carboxy-1-propenyl)cyclopropanecarboxylate represented by the formula (4):



wherein  $R_1$  and \* are the same as the above, which is an optical isomer of the 3,3-dimethyl-2-(2-carboxy-1-propenyl)cyclopropanecarboxylate of the formula (1) alone or a mixture thereof.

13. The method for producing according to any of claims 1 to 12, wherein  $R_1$  is a straight chain, branched chain or cyclic alkyl group having 1 to 20 carbon atoms, or a benzyl group substituted with a substituent or substituents selected from a halogen atom, a methyl group, a methoxyl group, a methoxymethyl group and a phenoxy group.

14. The method for producing according to claim 6, wherein the bidentate nitrogen-containing compound is 2,2'-bipyridyl or 1,10-phenanthroline which may be substituted with a methyl group, a methoxy group, a benzyl group, a benzyloxy group, a phenyl group, a phenoxy group, a cyano group, a methoxycarbonyl group, an acetyl group, a sulfo group, a halogen atom or a nitro group.

15. The method for producing according to claim 12,

wherein the optically active 3,3-dimethyl-2-(2-carboxy-1-propenyl)cyclopropanecarboxylate and the optically active 3,3-dimethyl-2-(1-propenyl)cyclopropanecarboxylate are (+)-trans isomers.